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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/780,370	02/12/2001	Alan D. Marshall	30001475US	7025

7590 09/24/2004

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EXAMINER

PYZOCHA, MICHAEL J

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/780,370

Applicant(s)

MARSHALL, ALAN D.

Examiner

Michael Pyzocha

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10, 11 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 6-9 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 08/17/2004.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. The office action submitted on 07/21/2004 is vacated due to the possible confusion of both the "final" and "non-final" boxes being checked in the Office Action Summary. The statutory period for reply is three (3) months from the mailing date of this new office action.
2. Claims 1-16 are pending.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the GUI, Internet and Browser of column 6 lines 21-27 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet,

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even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because Figure 3 number 52 is referred to as a "graphical image" in the specification (column 8 lines 25-26). However, in Figure 3 number 52 is shown as an AV work.

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Claim Objections

6. Claim 8 is objected to because of the following informalities: a space should be between "Claim" and "1". Appropriate correction is required.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 15 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 15 merely claims a computer program arranged to configure a computer to implement a method. This non-functional descriptive material, and is not statutory because it is not a physical "thing" nor a statutory process, because there are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed aspects of the invention which permit the computer program's functionality to be realized. Since a computer program is merely a set of instructions capable of being executed by a computer, the program itself is not a process, without the computer-readable medium needed to realize the computer program's functionality.

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In contrast, a claimed computer-readable medium encoded with a computer program defines structural and functional interrelationships between the computer program and the medium which permit the computer program's functionality to be realized, and it is thus statutory.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 4, 5, 10, 11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schumann et al (U.S. 6,285,774) and Auerbach et al (U.S. 5,673,316).

As per claim 1, 11, 15 and 16 Schumann et al discloses the creation of a plurality of sections of a data file with pre-calculated elementary watermarks (see column 5 lines 65-67 through column 6 line 1 the "marks" are the watermarks embedded in the sections and are pre-calculated as a "1" or a "0" see column 6 lines 53-56), a data file watermark (see column 5 lines

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20-24 and column 6 lines 64-67 the "source of copying message" is the data file watermark), selecting elementary watermarks (see column 5 lines 60-67 column 6 lines 1-3 for the selection of what sections to watermark and column 6 lines 53-56 for the selection of the elementary watermarks), constructing watermark (see column 6 lines 64-67).

Schumann et al fails to disclose a receipt of a request for the data file.

However, Auerbach et al discloses a request for a data file that contains a watermark (see column 3 lines 45-53 where the data file is a cryptographic envelope that contains such contents as a JPEG picture see column 4 lines 10-12 and a watermark see column 4 lines 21-24).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the request for data file with a watermark of Auerbach et al with the method of applying a digital watermark from Schumann et al.

Motivation to do so would have been to initiate the creation of the watermarked data file (see column 3 lines 45-53).

As per claim 2 Schumann et al as modified above discloses a transaction specific watermark (see column 5 lines 32-36 where the "message" is the watermark based on a serial number).

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As per claim 4 Schumann et al discloses elementary watermarks that are binary representations (see column 6 lines 53-56).

As per claim 5 Schumann et al as modified above discloses the addition of error correction (see column 8 lines 51-60).

As per claim 10 Schumann et al as modified above discloses selection of sections from the file most suitable for addition of elementary watermarks (see column 5 lines 56-63).

As per claim 13 Schumann et al as modified above discloses storing the elementary watermarks and sections of data (see column 6 lines 2-8 where the replacement blocks are the sections of data and the running mark storage unit is where the elementary watermarks are stored).

As per claim 14 Schumann et al as modified above discloses selecting each section of data and adding an elementary watermark to it (see column 6 lines 53-67 for the selection of the elementary watermarks)

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schumann et al and Auerbach et al as applied to claim 2 above, and further in view of Barton (U.S. 5,646,997).

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Schumann et al and Auerbach et al fail to disclose the retrieving of user data from a user database to construct a transaction specific watermark.

However, Barton discloses the use of a database to store the user data for a watermark (see column 2 lines 56-67 through column 3 lines 10).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the method of applying a digital watermark from Schumann et al and Auerbach et al with the use of a user database for construction of a watermark found in Barton.

Motivation to do so is because the use of user data in watermarks provides a higher-level of authentication (see column 3 lines 9-10).

Allowable Subject Matter

11. Claims 6-9 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leighton (U.S.

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5,664,018) discloses a watermarking process that is resilient to collusion attacks. Davidson et al (U.S. 5,559,884) discloses a method for generating a signature for a computer program by breaking a code module into sections and watermarking each section. Cox (U.S. 6,069,914) discloses watermarking multimedia data with breaking the data into smaller pieces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pyzocha whose telephone number is (703) 305-0712. The examiner can normally be reached on 7:30am - 5:00pm with first Fridays of the bi-week off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703)308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Andrew Caldwell
Andrew Caldwell

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJP